

SAFETY BY DESIGN

Federal Highway Administration

ROAD SAFETY AUDIT

Prevention is better than the cure.

This principle has been a long-standing tenet in the field of medicine. The Federal Highway Administration (FHWA) is exploring the use of a similar philosophy in the field of roadway engineering. Known as a *Road Safety Audit (RSA)*, this approach which originated in the United Kingdom in the 1980s, is now widely used in Australia and New Zealand and was recently evaluated by a multidisciplinary delegation of U.S. highway engineers, safety specialists and educators, representing all levels of government.

What is a Road Safety Audit?

Road Safety Audits address the safe operation of a roadway and involve the formal examination of an existing or future road or traffic project by an independent team of trained specialists. The team assesses the crash potential and safety performance of a roadway project and prepares a report that identifies potential safety problems. Project officials or managers can then evaluate, select and justify appropriate project changes.

What's the purpose?

The underlying objectives of *Road Safety Audits* are to minimize the risk of a traffic crash and ensure that measures to eliminate or reduce identified roadway problems are fully considered. In addition, *Road Safety Audits* promote the safety of ALL roadway users, establish the importance of incorporating safety in all roadway design work and reduce the whole-life costs of a project.

Safety audits can be used to identify potential safety problems and provide a project manager or deciding official with information and tools to make sound decisions from the perspective of the roadway user.

What are the benefits?

It's less expensive to erase a line than to remove concrete. Inexpensive changes can be made in a redesign, rather than through a reconstruction. *Road Safety Audits* are an efficient and cost-effective approach to improving the safety of a project. They can identify deficiencies before they are built into the project and espouse quality improvement by building in safety from the beginning. Ultimately, safety audits can help reduce the number, severity and costs of traffic crashes and maximize the potentials of a forgiving roadway.

What's the next step?

The FHWA is working with the States and local jurisdictions to determine the feasibility of integrating *Road Safety Audits* into the process of roadway project development, construction, and operation. Several states have begun the pilot testing of safety audits in select locations. A report on these pilots will be issued in December, 1999. Interested state and local transportation departments are invited to participate in this effort. For more information contact your local FHWA division office or Byron Dover at FHWA 202-366-2161 or Byron.Dover@igate.fhwa.dot.gov

Road Safety Audits - Status 9/99

In the fall of 1996, FHWA sponsored an international scanning team consisting of State, local, FHWA, and academia representatives, to New Zealand and Australia to review the road safety audit process. The team's conclusion was that road safety audits hold promise for maximizing safety of roadway design and operations and should, as a minimum, be piloted in this country.

In 1997, the Office of Highway Safety¹ (OHS) and scan team members focused on marketing the process at conferences and meetings and solicited interest by agencies to pilot the process. The Scan trip Final Report (FHWA Study Tour of Road Safety Audits - Part 1 and 2) was published and is available by downloading from the FHWA's International web page (www.international.fhwa.dot.gov), or contacting Byron Dover at FHWA on (202) 366-2161. These reports can also be ordered from ITE. The FHWA's Office of Highway Safety Infrastructure (HMHS) also has a road safety audit site (www.ohs.fhwa.dot.gov) - Safety Management Systems - where more details are provided.

The HMHS is partnering with States² to pilot the road safety audit process in 1998 - 1999. A workshop was held in May, 1998 for participating States. The operational implementation of the road safety audit process by the pilot States is being assessed. The FHWA is sponsoring the evaluation in coordination with the other partners. The contractor, responsible for the evaluation and final report has developed an evaluation methodology which was submitted to the pilot states to make them aware of the type of data the contractor will need to conduct its evaluation. The consultant made site visits to most of the pilot states in the spring and summer of 1999, and will prepare and submit a draft report to the FHWA in October, and a final report in December, 1999. The States' good practices will be discussed in the report.

A "toolbox," containing information for both promoting and assisting in the implementation of the process is being planned.

¹The Office of Highway Safety is now the Office of Motor Carrier and Highway Safety under the new restructuring of FHWA.

²There were fourteen (14) States initially elected to participate in the safety audit pilots in 1998. The States were **California, Georgia, Kentucky, Minnesota, Missouri, Montana, New Jersey, New York, Ohio, Pennsylvania, Rhode Island, Texas, Vermont, and Wisconsin.**

Also FHWA and ITE are partners in the development and maintenance of a road safety audit Internet web site. The Road Safety Audit Internet Website is (<http://www.roadwaysafetyaudits.org>). This web site would include selected documents, a bulletin board, directories of road safety articles and publications, linkages to other appropriate web sites and other information determined as appropriate by FHWA and ITE. The site should be available for use by Mid-December, 1999.

For more information, contact Mr. Byron Dover at (202) 366-2161 or Fred Small at (202) 366-9212.